-- INITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|---------------|-------------------------|---------------------|------------------|
| 10/612,448 | 06/30/2003 | Julie Y. Qian | SAM0014/US | 5430 |
| 75 | 90 04/08/2005 | | EXAMINER | |
| Dale A. Bjorki | man | CHAPMAN, MARK A | | |
| Kagan Binder, F | | ART UNIT | PAPER NUMBER | |
| 221 Main Street | | 1756 | | |
| Stillwater, MN | 55082 | DATE MAILED: 04/08/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | | M | | | |
|--|---|---------------------|---|--------------|-------|--|--|--|
| Office Action Summary | | Application | n No. | Applicant(s) | | | | |
| | | 10/612,448 | 3 | QIAN ET AL. | | | | |
| | | Examiner | | Art Unit | | | | |
| | | Mark A. Ch | • | 1756 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1)🖂 | Responsive to communication(s) filed | on <i>1-20-04</i> . | | | | | | |
| | | | | | | | | |
| 3)□ | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| | closed in accordance with the practice | under Ex parte Qua | yle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | | | |
| 5)□ 6)⊠ 7)□ | 4) ☐ Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicati | ion Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some col None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| 2) Notic 3) Inform | t(s) se of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO-1449 or PTo- r No(s)/Mail Date <u>01202004</u> . | -948) O/SB/08) | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal 6 6) Other: | oate | -152) | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Application/Control Number: 10/612,448 Page 2

Art Unit: 1756

DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms S and D are not sufficiently described. The terms need to be described as related to the carrier and its solvated or dispersed state.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (6,649,316) in view of Ooij (5,204,219). Baker teaches a liquid toner where an organosol has a reversible state caused by the application of heat energy (col. 2 lines 52-67). Ooij teach similar organosols where hydrogen bonding functionality of binder resins is employed to control gel rigidity (col. 12 lines 27-45). It would have been obvious to one of ordinary skill in the art to combine the teachings of Ooij with the developer of Baker to produce a liquid toner containing a reversible gel that is controlled by hydrogen bonding functionality because of the similarities of the disclosed

Application/Control Number: 10/612,448 Page 3

Art Unit: 1756

organosols and the known effect of the organosols in toner applications as taught by each reference.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/612,182. Although the conflicting claims are not identical, they are not patentably distinct from each other because similar three dimensional gel with reversible controlled rigidity are employed for the same purpose of reduced filming.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10/612,444. Although the conflicting claims are not identical,

Art Unit: 1756

they are not patentably distinct from each other because similar three dimensional gel with reversible controlled rigidity are employed for the same purpose of reduced filming.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

- 8. Claims 1-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/612,058. Although the conflicting claims are not identical, they are not patentably distinct from each other because similar three dimensional gel with reversible controlled rigidity are employed for the same purpose of reduced filming.
- 9. This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Chapman whose telephone number is 571-272-1381. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/612,448 Page 5

Art Unit: 1756

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark A. Chapman Primary Examiner Art Unit 1756

MC